

# 5G NR M2M Gateway



Industrial IoT 5G NR M2M gateway for Wi-Fi and RS-232/RS-485 with digital and analog I/O

DWM-3010

- Wireless 802.11ac/n/g/b/a
- 5G NR/ LTE (sub-6 GHz/LTE Cat.20)
- WPA/WPA2/WPA-PSK/WPA2-PSK/802.1x encryption
- Advanced VPN: IPSec/OpenVPN/L2TP/PPTP/GRE
- Remote management with D-ECS (D-Link Edge Cloud Solution)
- Connect up to 50 devices to your Wi-Fi network
- Rugged design for wide-temperature operation



### High-Speed 5G NR Internet

5G NR speeds up to 1 Gbps for lightning-fast downloads, lower latency and reduced congestion



### Dual-Band AC1200

866 Mbps (5 GHz) + 300 Mbps (2.4 GHz) dual-band connectivity



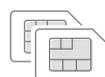
### Gigabit Ethernet Ports

High-speed Gigabit connections for wired devices



### Up to 50 Devices

Connect up to 50 Wi-Fi devices in device-dense working environments



### Dual SIM Slots

Dual SIM slots allows redundant connectivity to ensure uninterrupted operation



### Supports IPv6

Future-proof and compatible with the next generation of Internet standards

**Hardware/Port**

Device Interfaces	1 x 10/100/1000 Ethernet WAN/LAN Ports, 2 x 10/100/1000 Ethernet LAN port
LED	Serial: Blue OFF: Serial function is disabled Fast Flashing: Serial port is working Status: Blue OFF: Host disconnected Fast Flashing: WAN Ethernet or LTE connection established, obtaining IP PWR: Blue OFF: Device is powered OFF or in standby mode Steady ON: Device is powered ON Flashing once per second: Device is at "Delay OFF" mode Fast Flashing: Firmware is upgrading or device is in recovery mode Wi-Fi: Blue OFF: 2.4 GHz/5 GHz Wi-Fi is disabled Steady ON: 2.4 GHz/5 GHz Wi-Fi is enabled Fast Flashing: Data is being transmitted/received via 2.4 GHz/5 GHz Wi-Fi 5G1L Cellular & 5G1S Cellular: Blue SIM-A Steady ON: SIM-A is inserted for 3G/4G/5G connection SIM-A OFF: SIM-A is not inserted or not in use SIM-B Steady ON: SIM-B is inserted for 3G/4G/5G connection SIM-B OFF: SIM-B is not inserted or not in use HIGH Steady ON: 3G/4G/5G signal strength is at high level LOW Steady ON: 3G/4G/5G signal strength is at low level WAN/LAN1 - 3: Green Steady ON: Ethernet LAN or WAN connection is established Flash: data packets are transferring
Power Supply	DC 9V / 2.7A ~ 36V / 0.7A
Ethernet	1 x 10/100/1000 Ethernet WAN/LAN port 2 x 10/100/1000 Ethernet LAN ports
SMA Antenna	4 x Female type jack for 5G NR/LTE 2 x Male type jack for Wi-Fi
Communication Bus	1 x RS-232 (Tx/Rx) 1 x RS-485 (D+(B), D-(A))
Digital I/O	2 x DI (Isolated, "Logic 0": 0~2V, "Logic 1": 5V ~ 30V) 2 x DO (Isolated, Non-Relayed Output, 24V/300 mA for each port)
Analog I/O	2 x AI (0~10V, 12 bit ADC, sampling rate up to 125 KHz)

**5G NR/4G LTE Modem**

5G NR	5G NR, Sub-6 GHz, 100 MHz (BW)
4G LTE	LTE support up to Cat.20
Operating Bands	5G NR Refarmed Sub-6: n1, n2, n3, n5, n7, n8, n12, n20, n28, n41, n66, n71 New Sub-6: n77, n78, n79 LTE FDD: B1, B2, B3, B4, B5, B7, B8, B12, B13, B14, B17, B18, B19, B20, B25, B26, B28, B29, B30, B32, B66, B71 LTE TDD: B34, B38, B39, B40, B41, B42, B46, B48 WCDMA/HSPA+: B1, B2, B3/9, B4, B5/6/19, B8
Maximum Cellular Data Throughput	5G NR: 900 Mbps (DL, Ethernet) / 150 Mbps (UL, Ethernet)
Interface	USB 3.0 miniPCIe
Dual SIM Slots	3V/1.8V 6-pin standard (3FF Micro SIM)

**Wi-Fi (802.11)**

Standards	IEEE 802.11 ac/n/g/b/a, 2.4 GHz/5 GHz
Wi-Fi Data Rates	Up to 866 Mbps with 802.11ac clients Up to 300 Mbps with 802.11n clients

**Web UI**

Web Management	English (default)
LAN Default IP Address	192.168.0.1
Default Subnet Mask	255.255.255.0

**Wireless WAN**

5G NR/4G LTE	5G NR/4G LTE modem to connect to Internet
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**WAN Control**

WAN	Cellular & Config Ether-WAN; Failover
Cellular	3GPP, 5G NR/4G LTE, IPv4/v6
Ether-WAN	Dynamic IP, Static IP, PPPoP, PPTP, L2TP
Network Monitor	ICMP/DNS Query
Dual SIM slots for CELL	SIM A, SIM B failover

**Wi-Fi**

Standard	802.11 ac/n/g/b
Mode	AP router, WDS, WDS hybrid modes
Functions	Multi-SSID, WMM
Security	WEP, WPA, WPA2, WPA-PSK, WPA2-PSK, 802.1x
Captive Portal	External web portal
2.4 GHz SSID	DWM-3010-XXXX (XXXX is last four random digits based on MAC address)
5 GHz SSID	DWM-3010-5G-XXXX (XXXX is last four random digits based on MAC address)
Auto Channel Scan	Enabled
Pre-shared Key	Random 8-character key (alphanumeric case sensitive)

**Protocol**

LAN & VLAN	DHCP server/relay, port/tag based VLAN
IPv6	Dual stack, IPv4/IPv6
Port Forwarding	NAT 1-1, 1-many, transversal, DMZ, Virtual Server & Computer, VPN passthrough
Routing	Static, Dynamic - RIP1/RIP2, OSPF, BGP
QoS	Policy-based, 802.1q and TOS for priority queues

**Service**

Cellular Toolkit	Data usage, SMS, SIM PIN, USSD, Network Scan
Event Handling	User-defined mgmt/notify event; action & trigger by SMS, mail, syslog, SNMP trap, Modbus, I/O
D-ECS (D-Link Edge Cloud Solution)	Remote Management of Devices, Zero Touch Deployment, Device GPS Location

## Software Specifications

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### Security

VPN Tunneling	IPSec, OpenVPN, PPTP, L2TP, GRE
Scenario	Site/host to site/host; dynamic VPN
VPN Capability	IPSec up to 16 tunnels
Firewall	SPI firewall iwth stealth mode, IPS
Access Control	Packet filter, URL blocking, MAC filter

### Field Com

Virtual COM	RFC2217, TCP client, TCP server, UDP
Modbus	Gateway for Modbus TCP/RTU/ASCII Master/Slave Access; Slave for Device Status/Information Access

### Administration

Configuration	Web UI, CLI, Command Script, D-ECS (D-Link Edge Cloud Solution)
Management	SNMPv3 Std. & D-ECS (D-Link Edge Cloud Solution)
System	Upgrade, backup & restore, reboot & reset, Syslog
Diagnostics	Packet analyzer, diagnostic tools

## Electrical Characteristics

### Power

Power Input	DC 9V/2A - 36V/0.7A +/- 5%
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## Environmental Requirements

### Temperature

Operating Temp./Humidity	Temperature: -30°C ~ 60°C, Humidity: 10%~95% non-condensing
Storage Temp.	Temperature: -40°C ~ 85°C, Humidity: 0%~95% non-condensing
RoHS	RoHS compliant

## ID/Mechanical



Dimensions	62 x 125 x 160 mm (w/o mounting kit)
Weight	1.15 kg

## Order Information

DWM-3010	5G NR M2M Gateway
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